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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,716	07/14/2003	Atsushi Suzuki	053588-5014	4192
9629	7590	04/01/2005	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			SHAH, MANISH S	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/617,716

Applicant(s)

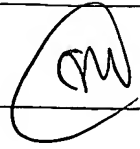
SUZUKI ET AL.

Examiner

Manish S. Shah

Art Unit

2853



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4 & 18/4 are rejected under 35 U.S.C. 102(b) as being anticipated by Takada et al. (# US 2002/0059883 A1).

Takada et al. discloses an ink set for inkjet recording for forming a black image portion ink a color image with a black ink and color ink, wherein black ink includes cationic self dispersible carbon black (see Abstract; [0064]-[0066]) and the color ink includes an anionic self dispersible pigment ([0090]), wherein the carbon black is contained in an amount of 0.1 to 15% by weight of total ink ([0075]). They also disclose that the black ink and the color ink contains from 0.001 to 5% by weight of a surfactant ([0087], see Examples).

2. Claims 6-10 & 18/10 are rejected under 35 U.S.C. 102(b) as being anticipated by Takada et al. (# US 2002/0059883 A1).

Takada et al. discloses a method for inkjet recording including recording a color image in accordance with recording signals by ejecting from an orifice a black ink and color ink ([0093]; figure: 1-4, 8), wherein black ink includes cationic self dispersible

carbon black (see Abstract; [0064]-[0066]) and the color ink includes an anionic self dispersible pigment ([0090]), wherein the carbon black is contained in an amount of 0.1 to 15% by weight of total ink ([0075]). They also disclose that the black image portion in the color image is formed with black ink and the color ink ([0091]-[0093]), and the ejecting the black ink immediately after the color ink or the color ink immediately after the black ink, which basically same as 20 ms or less ([0021], [0091]-[0093]). They also disclose that the black ink and the color ink contains from 0.001 to 5% by weight of a surfactant ([0087]; see Examples).

3. Claims 12-16 & 18/16 are rejected under 35 U.S.C. 102(b) as being anticipated by Takada et al. (# US 2002/0059883 A1).

Takada et al. discloses an apparatus for inkjet recording for forming a color image including an ink cartridge for ejecting a black ink and another ink cartridge for ejecting a color ink (figure: 1-4, 8), wherein black ink includes cationic self dispersible carbon black (see Abstract; [0064]-[0066]) and the color ink includes an anionic self dispersible pigment ([0090]), wherein the carbon black is contained in an amount of 0.1 to 15% by weight of total ink ([0075]). They also disclose that the black image portion in the color image is formed with black ink and the color ink ([0091]-[0093]), and the ejecting the black ink immediately after the color ink or the color ink immediately after the black ink, which basically same as 20 ms or less ([0021], [0091]-[0093]). They also disclose that the black ink and color ink contains from 0.001 to 5% by weight of a surfactant ([0087]; see Examples).

4. Claims 1, 4 & 18/4 are rejected under 35 U.S.C. 102(b) as being anticipated by Wickramanayake et al. (# US 6036759).

Wickramanayake et al. discloses an ink set for inkjet recording for forming a black image portion ink a color image with a black ink and color ink, wherein black ink includes an anionic self dispersible carbon black (see Abstract; column: 3, line: 1-35) and the color ink includes an anionic or cationic self dispersible pigment (column: 3, line: 35-67). They also disclose that the black ink and the color ink contains from 0.001 to 5% by weight of a surfactant (column: 4, line: 23-50).

5. Claims 6, 10 & 18/10 are rejected under 35 U.S.C. 102(b) as being anticipated by Wickramanayake et al. (# US 6036759).

Wickramanayake et al. discloses a method for inkjet recording including recording a color image in accordance with recording signals by ejecting from an orifice a black ink and color ink (column: 6, line: 30-66), wherein black ink includes an anionic self dispersible carbon black (see Abstract; column: 3, line: 1-35) and the color ink includes an anionic or cationic self dispersible pigment (column: 3, line: 35-67). They also disclose that the black ink and the color ink contains from 0.001 to 5% by weight of a surfactant (column: 4, line: 23-50).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 11 & 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takada et al. (# US 2002/0059883 A1) in view of Fukushima et al. (# US 5151128).

Takada et al. discloses all the limitation of an ink set, a method of printing and an inkjet recording apparatus except that the black ink includes a compound represented by the formula  $R-O-X_nH$ , wherein R is functional group having 4 to 8 carbon atoms selected from the group consisting of an alkyl group, an alkenyl group, an alkynyl group, a phenyl group, an alkylphenyl group, an alkenylphenyl group and a cycloalkyl group, X is an oxyethylene group or an oxypropylene group; and n is an integer from 1 to 4.

Fukushima et al. teaches that to prevent generation of ink runs and promote drying and penetration of an ink (column: 2, line: 65-68), ink composition includes a compound represented by the formula  $R1-X-O-R2$ , wherein R1 & R2 each is an hydrogen atom or an alkyl group, with the proviso that they cannot both be a hydrogen atom, and X is a random polymer of ethylene oxide and polypropylene oxide (column: 2, line: 15-30; see Table: 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink composition of Takada et al. by the aforementioned teaching

of Fukushima et al. in order to prevent generation of ink runs and promote drying and penetration of an ink, which gives high quality bleed free printed image.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2853

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manish S. Shah  
Primary Examiner  
Art Unit 2853



MSS

3/28/05